

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
8 January 2004 (08.01.2004)

PCT

(10) International Publication Number
WO 2004/003687 A3

(51) International Patent Classification⁷: **G08G 1/123**

(21) International Application Number:
PCT/US2003/020085

(22) International Filing Date: 27 June 2003 (27.06.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/391,669 27 June 2002 (27.06.2002) US

CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,
MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC,
SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA,
UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (regional): ARIPO patent (GH, GM,
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),
Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO,
SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM,
GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(71) Applicants and

(72) Inventors: **BERGER, Robert, E.** [US/US]; 16672 Pacific
Coast Highway, Suite A, Huntington Beach, CA 92649
(US). **CLARK, Richard, L.** [US/US]; 1543 North View,
Westlake Village, CA 91362 (US).

(74) Agents: **MARTINEZ, Raul, D.** et al.; Blakely, Sokoloff,
Taylor & Zafman, 12400 Wilshire Blvd., 7th Floor, Los
Angeles, CA 90025-1026 (US).

(81) Designated States (national): AE, AG, AL, AM, AT, AU,
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,

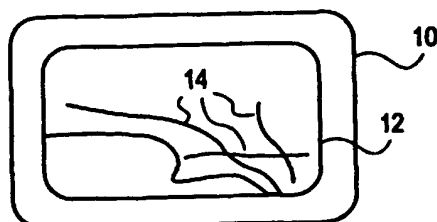
Published:

- with international search report
- before the expiration of the time limit for amending the
claims and to be republished in the event of receipt of
amendments

(88) Date of publication of the international search report:
8 April 2004

For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.

(54) Title: **TRAFFIC DATA ACQUISITION SYSTEM AND METHOD**



(57) Abstract: A device, system, and method for providing real-
time traffic information to a user is disclosed. In various embodi-
ments, a wireless transmitter sends traffic information to a portable
device (10) that can receive and display the traffic information on a
map of the display (12). Various roadway (14) condition indicators
may be used to convey the type and severity of roadway conditions.

WO 2004/003687 A3

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/20085

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : G08G 1/123

US CL : 340/995.1

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
U.S. : 340/995.1, 991, 990, 928, 905; 342/357.13, 357; 701/208, 213; 364/449, 449.6, 444

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
map and display\$3 and traffic and information and (radio or wireless)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5,959,577 A (FAN ET AL.) 28 September 1999, figs. 1, 5, 12-13, col. 2, line 60 to col. 3, line 46, col. 4, lines 41-54, col. 6, line 6 to col. 7, line 20 and col. 11, line 1-12.	1-4, 6-14, 16-23, 25-35 & 37-40
X	US 6,140,943 A (LEVINE) 31 October 2000, figs. 1, 3-4, 12 & 14, col. 2, line to col. 4, line 16 and abstract.	5, 15, 24 & 36

☐ Further documents are listed in the continuation of Box C.

☐ See patent family annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"B" earlier application or patent published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T"

later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X"

document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y"

document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&"

document member of the same patent family

Date of the actual completion of the international search

03 January 2004 (03.01.2004)

Date of mailing of the international search report

02 FEB 2004

Name and mailing address of the ISA/US

Mail Stop PCT, Attn: ISA/US
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Facsimile No. (703) 305-3230

Authorized officer

Nguyen, Hung T.

Telephone No. 703-308-5156

Form PCT/ISA/210 (second sheet) (July 1998)

Best Available Copy